Need to officially declare 'Anthropocene' as human-influenced age in Earth's history

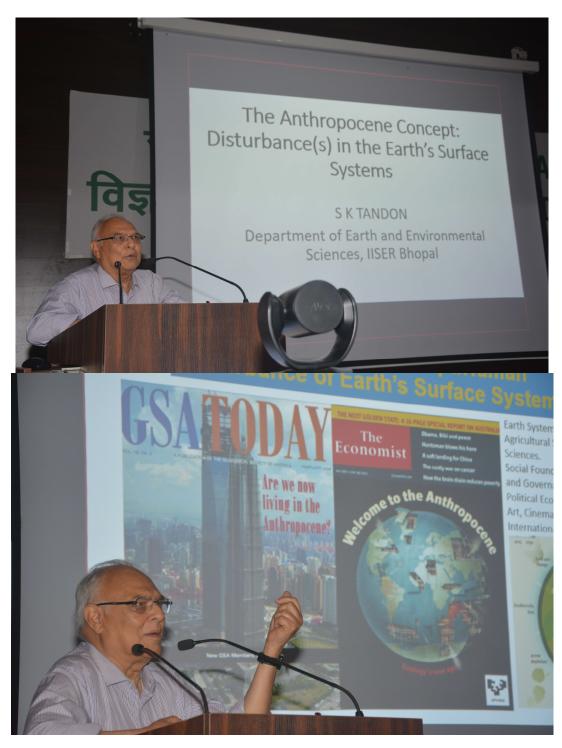
CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) celebrated National Science Day in the NEERI Auditorium on 28 February 2023. The Chief Guest Prof. S.K. Tandon, Visiting Professor, Department of Earth and Environmental Sciences, Indian Institute of Science Education and Research (IISER) Bhopal delivered the National Science Day Lecture on this occasion. Dr. Atul N. Vaidya, Director, CSIR-NEERI was also present on this occasion.

Highlighting the 'Anthropocene Concept', Prof. Tandon provided a brief overview of earth surface and its evolution. He mentioned that the earth is about 4.5 billion years old and its geological timeline is spilt into Cenozoic, Mesozoic and Paleozoic ages. Since last two hundred years humankind has caused such a negative footprint on the environment that some scientists describe it as a new geological age: the age of human impact on Earth or the Anthropocene, he added. Prof. Tandon pointed out that environment degradation and climate change have increased at a rate never seen in any other time in history. He also stated that the Anthropocene is an unofficial unit of geological time, used to describe the most recent period in Earth's history when human activity started to have a significant impact on the planet's climate and ecosystems. He stressed on the need to officially declare the 'Anthropocene' as a new geological timeline and separate it (Anthropocene) from the current geological timeline 'Holocene'. Prof. Tandon informed that the Anthropocene Working Group (AWG) under the International Commission on Stratigraphy still not decided the definition of 'Anthropocene' in the context of earth and environmental science. Expressing concern over the global water crisis and anthropogenic impact on the world's big rivers, he said that there is need to form a planetary boundaries framework that is useful for reconciling local and global water sustainability goals. He held the energy production, resource consumption and growing population mainly responsible for causing the appearance of this new geological age -Anthropocene, because the energy produced from coal, oil and natural gas emits large amounts of greenhouse gases, the main causes of global warming.

Dr. Vaidya in his welcome address said that science is essential for the development of human society for a variety of purposes. In the environmental context, the application of science and technology enhances the lives of people in various ways, he added. He urged the scientists to work on such R&D projects which can create scientific knowledge of public interest.

Dr. Shalini Dhyani conducted the proceedings and Prakash Kumbhare proposed the vote of thanks.

45 BDS students from Department of Public Health Dentistry, Government Dental College and Hospital, Nagpur visited CSIR-NEERI on this occasion.



Prof. S.K. Tandon, Visiting Professor, Department of Earth and Environmental Sciences, Indian Institute of Science Education and Research (IISER) Bhopal delivering the National Science Day Lecture



Atul N. Vaidya, Director, CSIR-NEERI delivering welcome address



The Chief Guest receiving Prof. S K Tandon receiving the memento



Dr. Shalini Dhyani conducted the proceedings